UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/851,040	05/08/2001	Stephen Paul Zimmerman	8072M	2167

27752	7590	11/28/2005

THE PROCTER & GAMBLE COMPANY
INTELLECTUAL PROPERTY DIVISION
WINTON HILL TECHNICAL CENTER - BOX 161
6110 CENTER HILL AVENUE
CINCINNATI, OH 45224

EXAMINER
BECKER, DREW E

ART UNIT	PAPER NUMBER
1761	

DATE MAILED: 11/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

		Application No.	Applicant(s)
Office Action Summary		09/851,040	ZIMMERMAN ET AL.
		Examiner	Art Unit	
		Drew E. Becker	1761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>05 October 2005</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-3,5-23,28,29 and 31-34</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-3,5-23,28,29 and 31-34</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

2.   Claims 1-3, 8-15, 18-23, 28-29, and 31-34 are rejected under 35 U.S.C. 103(a)

as being unpatentable over Szwerc [pat. No. 4,844,919] in view of Applicants Admitted

Prior Art (page 8, lines 19-32 of the specification).

Szwerc teaches snack pieces comprising consistent concave-curved pieces with

random surface features in the form of wavy lines and dots along its side as well as a

random surface topping (Figures 1-3) and a thickness of 3mm (column 4, line 64).

Szwerc does not recite a volumetric bulk density of $8-80 \times 10^{-5}$ g/mm^3 (claims 1, 15, 18,

21, 28) a volumetric bulk density of $35-60 \times 10^{-5}$ g/mm3 (claims 31-34), nesting (claim 2),

a package (claims 13-14, 20, 23, 29, 33-34), a lipid content of 18-40% (claims 10, 19,

22), a package bulk density of $10-35 \times 10^{-5}$ g/mm^3 (claims 14, 20, 23, 29, 33-34), a snack

piece density of 1 to 17×10^{-4} g/mm^3 (claim 11), or a modulus of elasticity of 0.1-6 g/mm^2

(claim 8). Applicants' Admitted Prior Art (AAPA) teaches non-planar snack pieces in a

nested arrangement with a volumetric bulk density of 26 to 59×10^{-5} g/mm^3, a package

volumetric bulk density of 13 to 20×10-5 g/mm3, chips which have similar shape and

size, a fat content of 38% (page 8, lines 19-32), and snack pieces that would have

inherently overlapped when packaged and also possessed some degree of surface

randomness. It would have been obvious to one of ordinary skill in the art to incorporate the snack piece features of AAPA into the invention of Szwerc since both are directed to snack pieces, since these densities and properties were well know in the snack piece art as shown by AAPA, and since more efficient packaging of the snack pieces of Szwerc, in view of AAPA, would have provided many benefits such as reduced shipping costs, reduced storage costs, and reduced packaging costs. It would have been obvious to one of ordinary skill in the art to use a snack piece density of 1 to 17×10^{-4} g/m^3 in the product of Szwerc, in view of AAPA, since this would have been done during the course of normal experimentation and optimization, since AAPA already included a volumetric bulk density of 26 to 59×10^{-5} g/mm^3 and a package volumetric bulk density of 13 to 20×10^{-5} g/mm^3 (page 8, lines 19-32), and since a dense snack piece would reduce the shipping and storage cost per package. It would have been obvious to one of ordinary skill in the art to use a modulus of elasticity of 0.1-6 g/mm^2 in the product of Szwerc, in view of AAPA, since this would have been done during the course of normal experimentation and optimization and since a more resilient chip would be less likely to break during shipping and transport.

3.   Claims 1-3, 8-15, 18-23, 28-29, and 31-34 rejected under 35 U.S.C. 103(a) as being unpatentable over Hamann [Des. 268,539] in view of Applicants Admitted Prior Art (page 8, lines 19-32 of the specification).

Hamann teaches snack pieces comprising consistent concave-curved pieces with random surface features (Figures 1-16). Hamman does not recite a volumetric bulk

density of 8-80x10^{-5} g/mm^3 (claims 1 , 15, 18, 21 , 28), a volumetric bulk density of 35-

60x10^{-5} g/mm^3 (claims 31-34), nesting (claim 2), a package (claims 13-14, 20, 23, 29,

33-34), a lipid content of 18-40% (claims 10, 19, 22), a package bulk density of 10-

35x10^{-5} g/mm^3 (claims 14, 20, 23, 29, 33-34), a snack piece density of 1 to 17x10^{-4}

g/mm^3 (claim 11), or a modulus of elasticity of 0.1-6 g/mm^2 (claim 8). Applicants'

Admitted Prior Art (AAPA) teaches non-planar snack pieces in a nested arrangement

with a volumetric bulk density of 26 to 59x10^{-5} g/mm^3, a package volumetric bulk

density of 13 to 20x10^{-5} g/mm^3, chips which have similar shape and size, a fat content

of 38% (page 8, lines 19-32), and snack pieces that would have inherently overlapped

when packaged and also possessed some degree of sudace randomness. It would

have been obvious to one of ordinary skill in the art to incorporate the snack piece

features of AAPA into the invention of Hamann since both are directed to snack pieces,

since these densities and properties were well know in the snack piece art as shown by

AAPA, and since more efficient packaging of the snack pieces of Hamann, in view of

AAPA, would have provided many benefits such as reduced shipping costs, reduced

storage costs, and reduced packaging costs. It would have been obvious to one of

ordinary skill in the art to use a snack piece density of 1 to 17x10^{-4} g/mm^3 in the product

of Hamann, in view of AAPA, since this would have been done during the course of

normal experimentation and optimization, since AAPA already included a volumetric

bulk density of 26 to 59x10^{-5} g/mm^3 and a package volumetric bulk density of 13 to

20x10^{-5} g/mm^3 (page 8, lines 19-32), and since a dense snack piece would reduce the

shipping and storage cost per package. It would have been obvious to one of ordinary

skill in the art to use a modulus of elasticity of 0.1-6 g/mm^2 in the product of Hamann, in view of AAPA, since this would have been done during the course of normal experimentation and optimization and since a more resilient chip would be less likely to break during shipping and transport.

4.   Claims 1, 3, 8-13, 15, 18-19, 21-22, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Szwerc in view of Carey et al [Pat. No. 5,747,092].

Szwerc teaches snack pieces comprising consistent concave-curved pieces with random surface features (Figures 1-3) and a thickness of 3mm (column 4, line 64). Szwerc does not recite a volumetric bulk density of 8-80x10^{-5} g/mm^3 (claims 1, 15, 18, 21, 28), a package (claims 13-14, 20, 23, 29), a lipid content of 18-40% (claims 10, 19, 22), a snack piece density of 1 to 17x10^{-4} g/mm^3 (claim 11), or a modulus of elasticity of 0.1-6 g/mm^2 (claim 8). Carey et al teach overlapping non-planar snack pieces comprising chips with random surface features (Figure 1), a bulk density of 5-9.5 lb/ft^3 or 8 to 15.2x10^{-5} g/mm^3 (column 20, line 39), a fat content of 18.5% (column 24, line 63), consistent size and shape (column 18, lines 5-39), packaging (column 20, line 37), a minimum thickness of .03125" (column 18, line 14), a maximum thickness at least 2.75times greater than the minimum thickness (column 5, line 59) which results in a maximum thickness of at leyst 2.2 mm. The snack pieces would have inherently overlapped when packaged. Carey et al teach the above mentioned components. Carey et al do not recite a snack piece density of 1 to 17x10^{-4} g /mm^3, or a modulus of elasticity of 0.1-6 g/mm^2. It would have been obvious to one of ordinary skill in the art to incorporate the snack piece features of Carey et al into the invention of Szwerc since

both are directed to snack pieces, since these densities and properties were well know

in the snack piece art as shown by Carey et al, and since more efficient packaging of

the snack pieces of Szwerc, in view of Carey et al, would have provided many benefits

such as reduced shipping costs, reduced storage costs, and reduced packaging costs.

It would have been obvious to one of ordinary skill in the art to use a snack piece

density of 1 to 17×10^{-4} g/mm^3 in the product of Szwerc, in view of Carey et al, since this

would have been done during the course of normal experimentation and optimization,

since Carey et al already included a bulk density of 5-9.5 lb/ft or 8 to 15.2×10^{-5} g/mm3

(column 20, line 39), and since a dense snack piece would reduce the shipping and

storage cost per package. It would have been obvious to one of ordinary skill in the art

to use a modulus of elasticity of 0.1-6 g/mm^2 in the product of Szwerc, in view of Carey

et al, since this would have been done during the course of normal experimentation and

optimization and since a more resilient chip would be less likely to break during shipping

and storage.

5.   Claims 5-6 and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Szwerc, in view pf AAPA, as applied above, and further in view of Fink et al [Pat.

No. 6,129,939].

Szwerc and AAPA teach the above mentioned components. Szwerc and AAPA do not

recite a bowl shape, or sphere-cap. Fink et al teach a snack piece comprising a bowl

shape with a sphere cap (column 2, line 24). It would have been obvious to one of

ordinary skill in the art to incorporate the bowl shape with a sphere-cap of Fink et al into

the product of Szwerc, in view of AAPA, since all are directed to snack pieces, since

Szwerc already included curved chips (Figures 1-3), since chips having bowl shapes

and sphere caps were commonly known as shown by Fink et al, and since bowl shaped

chips could more easily and efficiently scoop dip or salsa.

6.   Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Szwerc,

in view of AAPA and Fink et al, as applied above, and further in view of Fritos Scoops

(provided in the IDS of October 3, 2001).

Szwerc, MPA, and Fink et al teach the above mentioned components. Szwerc, AAPA,

and Fink et al do not recite a radius of curvature of 5-500mm. Fritos Scoops teaches

packaged snack pieces with a radius of curvature of 5-500mm (see sample). It would

have been obvious to one of ordinary skill in the art to incorporate the radius of

curvature of Fritos Scoops into the invention of Szwerc, in view of AAPA and Fink et al,

since Szwerc, AAPA, and Fink et al simply do not recite a value for the radius of

curvature, since Szwerc already taught a degree of curvature of 10-45° (column 5, line

8), and since this size of curvature was commonly used for snack pieces as shown by

Fritos Scoops.

7.   Claims 5-6 and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Szwerc, in view of Carey et al, as applied above, and further in view of Fink et al.

Szwerc and Carey et al teach the above mentioned components. Szwerc and Carey et

al do not recite a bowl shape, or sphere-cap. Fink et al teach a snack piece comprising

a bowl shape with a sphere cap (column 2, line 24). It would have been obvious to one

of ordinary skill in the art to incorporate the bowl shape with a sphere-cap of Fink et al

into the product of Szwerc, in view of Carey et al, since all are directed to snack pieces,

since Szwerc already included a concave surface (Figures 1-3), and since chips having

a bowl-shaped design with a sphere cap were commonly known as shown by Fink et al.

8.   Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Szwerc,

in view of Carey et al and Fink et al, as applied above, and further in view of Fritos

Scpops.

Szwerc, Carey et al; and Fink et al teach the above mentioned components. Szwerc,

Carey et al, and Fink et al do not recite a radius of curvature of 5-500mm. Fritos Scoops

teaches packaged snack pieces with a radius of curvature of 5-500mm (see sample). It

would have been obvious to one of ordinary skill in the art to incorporate the radius of

curvature of Fritos Scobps into the invention of Szwerc, in view of Carey et al and Fink

et al, since Szwerc, Carey et al, and Fink et al simply do not recite a value for the radius

of curvature, since Szwerc already taught a degree of curvature of 10-45° (column 5,

line 8), and since this size of curvature was commonly used for snack pieces as shown

by Fritos Scoops.

9.   Claims 2, 14, 20, 23, 29, and 31-34 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Szwerc, in view of Carey et al, as applied above, and further in view

of AAPA.

Szwerc and Carey et al teach the above mentioned components. Szwerc and Carey et

al do not recite nesting (claim 2), a package bulk density of $10\text{-}35\text{x}10^{-5}$ g/mm^3 (claims

14, 20, 23, 29), a package bulk density of $18\text{-}35\text{x}10^{-5}$ g/mm^3 (claim 34), or a volumetric

bulk density of $35\text{-}60\text{x}10^{-5}$ g/mm^3 (claims 32, 34). AAPA teach a snack piece being

packaged in a nested configuration, a volumetric bulk density of 26 to $59\text{x}10^{-5}$ g/mm^3,

and a package bulk density of 10-35x10^{-5} g/mm^3 (page 8, lines 19-32 of the

specification). It would have been obvious to one of ordinary skill in the art to

incorporate the nesting and bulk densities of AAPA into the invention of Szwerc, in view

of Carey et al, since all are directed to snack pieces, since Carey et al already includéd

packaging (column 20, line 37) and a bulk density of 5-9.5 lb/ft or 8 to 15.2x10^{-5} g/mm^3

(column 20, line 39), and since the nesting and bulk densities of AAPA would have

reduced shipping and transport costs due to the more efficient packing.

Response to Arguments

10.   Applicant's arguments filed October 5, 2005 have been fully considered but they

are not persuasive.

Applicant argues that Szwerc does not teach random surface features. However,

Szwerc clearly illustrated random surface features in Figures 1-3, in particular the wavy

lines and dots along its sides, as well as toppings. Applicant equating the term

"continuous" (used by Szwerc) and the term "patterned" (used by applicant's

specification). However, the continuous topping layer of Szwerc was applied randomly

without predefined pattern. The term "continuous" was simply meant to assure a

complete coverage of the food with the topping (column 4, lines 46-49). Applicant has

not addressed the random surface features, namely the dots and wavy lines, along the

side of Szwerc. Regardless, nearly any food product would have "random surface

features" when looked at through an ordinary magnifying glass, or microscope.

Applicant argues that Hamann does not teach "random surface features".

However, Hamann clearly illustrates a "random surface features" along its bottom

surfaces since it is merely the form of whatever potato which is used. More specifically,

the "eyes" shown in Figure 7 would be considered "random surface features".

Conclusion

11.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Drew E. Becker whose telephone number is 571-272-

1396. The examiner can normally be reached on Mon.-Fri. 8am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Milton Cano can be reached on 571-272-1398. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

DREW BECKER
PRIMARY EXAMINER

11-22-05